

BROADBAND TRIPLE BALANCED MIXERS

FEATURES

- Broad Frequency Coverage
- Low Conversion Loss
- High Isolation
- Drop-In or Connectorized Hermetic Packages
- Storage Temp -65°C to +125°C
- Operating Temp -54°C to +100°C



PERFORMANCE/SPECIFICATIONS @ +25°C

RF/LO Frequency (GHz)	Model Number	IF Frequency (GHz)	Conversion Loss (dB) (Typ./Max.)	Isolation			Package Style
				L-R	L-I	R-I	
				(Typ./Min.)			
2.0 – 20.0	STTB-4001	1.0 – 8.0	7.2 / 9.0	26 / 20	27 / 20	25 / 20	I, M
6.0 – 18.0	STTB-4002	2.0 – 8.0	6.5 / 8.5	28 / 23	27 / 20	29 / 25	I, M
1.0 – 10.0	STTB-4003	0.005 – 4.0	6.5 / 8.0	23 / 18	25 / 20	25 / 20	I, M
2.0 – 20.0	STTB-4008	0.005 – 8.0	7.5 / 9.0	25 / 20	25 / 20	25 / 20	I, M
6.0 – 26.5	STTB-4106	4.0 – 12.0	8.0 / 12.0	25 / 20	22 / 17	22 / 17	I, M

Model Number Designation

Model STTB-4001 – I L C
 I — Local Oscillator Power
 L — Package Style
 C — C for SMA Female Connectors
 Double Balanced Design

Local Oscillator Power Options

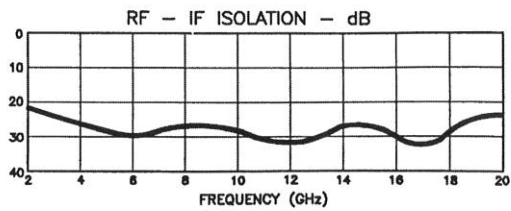
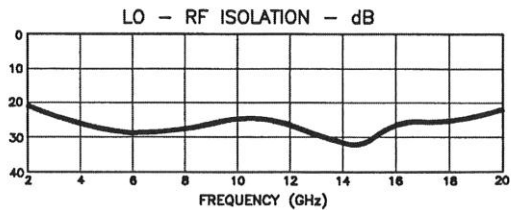
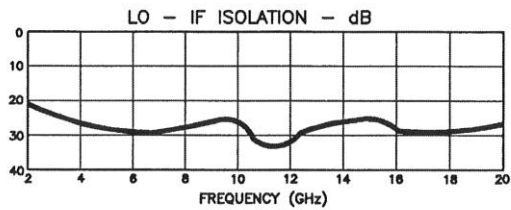
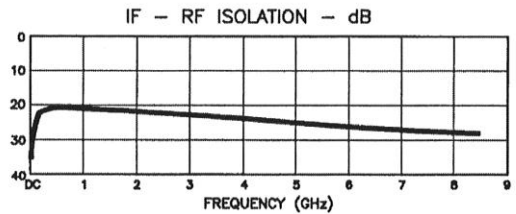
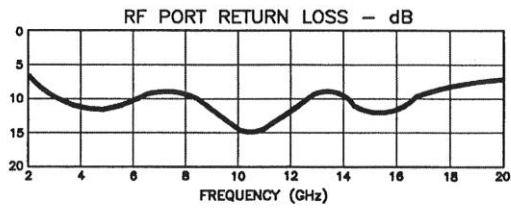
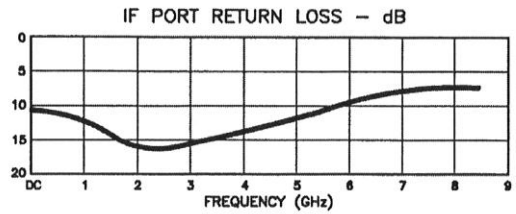
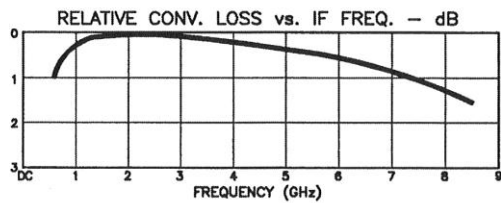
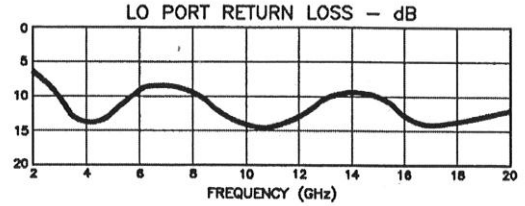
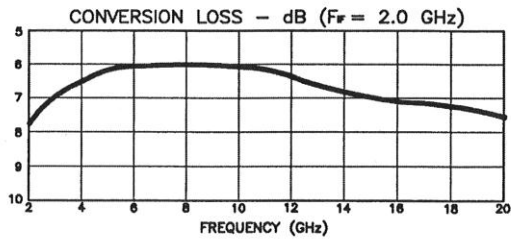
L Version +10 dBm (Typ 1 dB Input Compression Point +5 dBm)
 M Version +15 dBm (Typ 1 dB Input Compression Point +10 dBm)
 H Version +20 dBm (Typ 1 dB Input Compression Point +15 dBm)

Custom frequency bands, packages and higher power levels are available.

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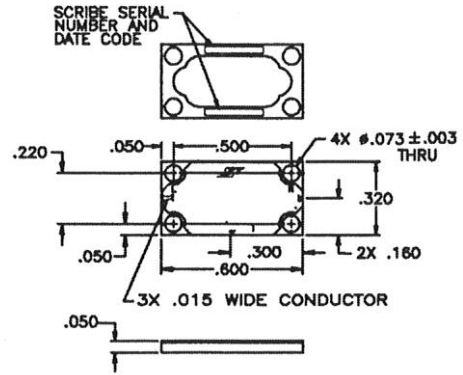
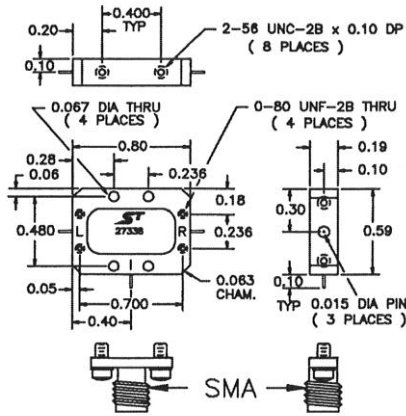
TYPICAL PERFORMANCE +25°

MODEL STTB-4001



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STANDARD OUTLINES



TYPICAL PERFORMANCE – SINGLE TONE INTERMODULATION PRODUCTS

Test Conditions	IM Product	IM Level, DBC
RF INPUT = 5.8 – 10.2 GHz @ +5 dBm LO INPUT = 12.0 GHz @ +20 dBm IF OUTPUT = 1.8 – 6.2 GHz	1R	32
	2R-L	48
	L-2R	49
	2L-2R	54
	3R-2L	51
	2R-3L	53
RF INPUT = 9.8 – 14.2 GHz @ +5 dBm LO INPUT = 16.0 GHz @ +20 dBm IF OUTPUT = 1.8 – 6.2 GHz	3R-L	>70
	3L-3R	>70
	2R-L	54
	2L-2R	58
RF INPUT = 13.8 – 18.2 GHz @ +5 dBm LO INPUT = 12.0 GHz @ +20 dBm RF OUT = 1.8 – 6.2 GHz	3R-2L	56
	2L-3R	>70
	3L-3R	>70
	2L-R	28
	2R-2L	44
	3L-2R	40
	3R-3L	40

dBc = dB BELOW DESIRED OUTPUT SIGNAL LEVEL